

REMARKS/ARGUMENTS

Claims 82, 85 and 90 have been amended for improved clarity in response to the Examiner's suggestions as discussed in more detail below. A few additional changes have been made for improved antecedent basis.

Claims 82-87 and 90-94 stand rejected under 35 USC 112, second paragraph for alleged indefiniteness. In particular, the Examiner takes the view that the recital in claim 82 that probes overlap a reference sequence of at least 50 bases requires that the probes in the probe set be longer than the reference sequence and thus in conflict with the prior recital in the claim that the probes be exactly complementary to the reference sequence.

Although in some contexts the term "spanning" may include probes whose aggregate length exceeds that of a reference sequence, applicants do not agree that the term necessarily requires that the aggregate length of overlapping probes be longer than the reference sequence. In the context of claim 82 and the prior recital that the different probes are exactly complementary to a reference sequence, it is apparent that the term "spanning" refers to overlapping probes whose aggregate length is the same as that of the reference sequence. As such, there is no conflict with the prior recital in the claim that the probes are perfectly complementary to the reference sequence. Nevertheless, in the interest of comprise and to expedite prosecution, applicants have replaced the term "spanning" with analogous terminology to the "exactly complementary" terminology used previously in the claim. Exactly complementary probes that "span" a reference are collectively exactly complementary to each base in the reference sequence, as now recited in the claim. Applicants note for the record that the first probe set of claim 82 is defined using the term "comprising" and is thus open to the presence of probes beyond the different probes specifically recited in the claim.

The Examiner also takes the view that the reference to at least three interrogation positions in step (2) of the claim is inconsistent with the reference to a single interrogation position in step (1) of the claim. However, step (2) of the claim is referring to the interrogation positions present in the collective probes in the first probe set not the individual probes. In other

words, if each probe of the first probe set has a single interrogation position, and the first probe set has at least three probes, then collectively, the probes of the first probe set have at least three interrogation positions. Step (2) of the claim has been amended to make clear that the "at least three" interrogation positions is referring to the probes of the first probe set collectively.

The Examiner makes analogous comments regarding claims 85 and 90.

Analogous amendments have been made to claim 90. Claim 85 has been amended to make clear that the reference to "at least three interrogation positions" is to the collective probes of the first probe set. The Examiner's other criticism of claim 82 does not appear relevant to claim 85 because the claim does not specify that the probes of the first probe set span a reference sequence. Therefore, no corresponding amendment has been made on this point.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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